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GENESEE FARMER.

SATURDAY, SEPTEMBER 23. 1837.

Queries on Wheat.

Many of our readers are probably aware that the legislature of Massachusetts has authorised an agricultural survey of the state, and that the Rev. H. Colman, favorably known by his agricultural writings, has been appointed by the Governor to perform the duties so required.—That he will accomplish the service with credit to himself, and great advantage to the State, cannot be doubted. In order to render the survey more complete, and facilitate its execution, Mr. Colman has addressed a series of queries to the farmers of that State, embracing the principal objects to which his attention will be directed, and the kinds of information he wishes to receive from them. We copy from this circular, the queries on the article of wheat, as most of these are equally applicable here as there, and no one subject connected with agriculture is of more importance than a full understanding of this.—We hope that our farmers will peruse it with care, and as many of them are qualified to give much information on the topics embraced, we hope they will take the trouble of committing their experience in the matter to writing, and by spreading it before the public through the medium of our columns, or those of some other journal, assist in rendering such excessive importations of foreign wheat as we have had the present year, forever unnecessary. We should be pleased to transfer the whole of Mr. Colman's circular to our pages; but the recollection that the empire State, though, in the matter of improvements of this kind rather slow, is still sure, gives us the hope that ere long we shall have a similar paper to present from some of our own agriculturists, men appointed by the State to fully investigate and report on the best methods of fertilizing our soil, improving our crops, and adding to the quantity and value of our products.

WHEAT.

1. History of its cultivation in the State.

2. Kinds; bearded or bald; flint or soft skin red or white; summer or winter; where obtained, and by what name designated; average weight per bushel.

3. Amount of any particular crop; extent of land sown.

4. Condition of the land; nature of the soil; whether newly cleared; burnt; swarded; how used for two or three years previously; how prepared for sowing.

5. Kind and quantity of manure; use of lime, plaster, or any compost manure.

6. The quantity of seed to an acre, and preparation of the seed; advantages or evils of steeping the seed.

7. The time of sowing; week and day, if possible, to be ascertained. The importance of such an inquiry as this, will appear for the reasons which follow:—It is strongly recommended that wheat should be sown before the 14th of September, so as to be well rooted before winter; thus affording a better chance against frosts. Or else so late as not to germinate before spring; this method has been tried.—Or frozen in water in the autumn, and kept so till the spring, which experiment is reported to have been successful. It is often desirable for wheat to follow Indian corn; but Indian corn in general, cannot be taken off in season to get the wheat sown. The discovery of any mode, such as the above, for example, by which the necessity of this early sowing would be obviated, would be of great advantage.

Wheat sown early, is more likely to have passed beyond injury from the hot, damp steaming weather, which occurs in July, and occasions rust. Query; whether late sown wheat is not likely to pass beyond that season, before it gets into a condition to be injured, which is while it is in the milk. Late sowing of wheat, as in some cases the last of May or the first of June, it is stated has carried the season of flowering beyond the time of the wheat insect, and the crop has been saved.

8. The diseases and accidents, if any; whether effected by rust, smut, or mildew; and if any circumstances of weather, situation, or particular condition of the plant, connected or contemporaneous with such occurrence. The situation or exposure of any blighted field, whether high and airy or low, damp, and confined.

9. Whether or not, affected by the vicinity of barberry bushes.

10. Whether winter killed or not; under what circumstances, as it regards the forwardness or lateness of the plant; and how affected by the snow.

11. Whether attacked by the Hessian fly, or other insects; and preventives if any.

Wheat is, in many parts of the country, subject to injury, from an insect or worm, whose appearance is comparatively recent; and whose habits are not well ascertained. He is making dreadful havoc in the wheat regions, producing in many cases an entire destruction of extensive fields of the most promising appearance; and has advanced at the rate of about forty miles in a year. The same insect, it is believed, though the identity is not perfectly ascertained, has attacked barley, rye, and oats with alarming success. The cultivation of barley, has on this account, been abandoned in some parts of the State, and so has the cultivation of wheat in what have hertofore been deemed some of the most productive wheat regions in New York. Inquiries and experiments on this subject are of immense importance. A perfect preventive or security, would be worth millions to the country.

12. Remedies or protection against blight or other accident.

13. The extirpation of weeds particularly injurious to the wheat crop, such as tares, cockle, chess, garlic, and the Canada thistle; and any machinery by which grain may be cleansed of 'foul stuff.'

14. The experience of farmers in the cultivation of wheat crops successively on the same land; and in sowing clover with the wheat, with a view to ploughing it in as manure for a succeeding crop; and whether customarily ploughed in with the stubble; or depastured; or mowed for one or more years.

15. The general subject of sowing grass with grain; and the value in such case of a stubble crop for winter fodder.

16. Harvesting; time and manner of cutting; and whether early or late cutting be preferable; the time in the opinion of some persons, making a material difference in the amount and value of the crop.

17. Threshing and cleaning; threshing machines; winnowing machines.

18. Manufacture of flour; various qualities; number of bushels required for a barrel; Millers' charges and profits.

19. Construction of mills, and flouring machinery; water, steam, and wind power; domestic mills.

20. Value and uses of bran.

21. Value and uses of wheat straw.

22. Value of a wheat crop compared with other crops; average yield.

23. Capacity of the State to furnish its own wheaten bread.

24. Experiments and observations in regard to this crop; cause of its general failure.

25. Some general estimate of the quantity and cost of imported flour consumed in any village, town or county.

It will be seen that the 7th and the 11th of the above queries are those embracing matters of most interest to western New-York, and the country generally, and we trust they will receive from our farmers that attention which their great importance demands. If winter wheat can be so prepared as to arrive at maturity when sown in the spring, the quantity of wheat grown in this state may readily be doubled: and by close observation, the insect and its habits, that has proved so destructive to wheat, must undoubtedly be determined and fully described—this once done, means of prevention will be readily found.

Harvesting Corn.

There are three modes of harvesting corn, each of which has its advocates among our farmers,—letting it stand undisturbed until gathered; cutting up by the bottom, and topping. In our opinion the matter must in a great measure be determined by the circumstances of the case. Repeated experiments have proved that corn ripened on the staiks without cutting or topping will be heavier than when either of these operations are performed. This indeed could not be doubted, since this process is nature's own method, and unless interrupted, must be perfect. Between topping, and cutting up, considerable differences of opinion have existed, and both modes are still practiced to a considerable extent in this country. In New-England topping has generally been preferred, as uniting the saving of green fodder with good corn; but there, as here, the practice of cutting up has for some years been gaining ground, since it has been shown that corn cut up was if any thing sounder and heavier than that topped, and that a vast saving of fodder was secured at the same time. Few kinds of dry food are more healthy, or nutritious, than corn stalks well saved, cut fine in a straw cutter, as they may easily be, and in that state fed to animals.

When corn has been bitten by frost before it is fit to harvest, the best course that can be pursued is probably to cut it up immediately by the bottom, and let the vitiated juices be as speedily dried up as possible. Some, whose opinions we highly value, suppose that when corn is bitten, nothing is gained by cutting up; but some experiments which we have seen made, have convinced us that in most cases the extra labor of cutting up will be well repaid. Topping after frost, can produce no effect, unless it is by giving a more free access to the influence of the sun and air, and thus hastening the hardening of the grain. Corn when frost-bitten, ceases at once to ripen by the ordinary processes of vegetation; all that can be done, is, to keep it from moulding while the remaining juices are drying out; and where the case will admit, immediate husking and thorough drying would give the most valuable corn.

If the farmer's object is to have sound corn without any reference to the fodder, he had better let it stand on the stalk unmolested until he is ready to gather it. If the fodder as well as the corn is an object with him, or if, as is frequently the case, corn is to be followed by wheat, then cutting up as soon as the grain is fully glazed, may be practiced with advantage. If his corn is frost-bitten, the quicker all circulation can be cut off, and the grain dried, the better it will be, and the method of harvesting adopted, whether topping cutting up, or husking, should have reference mainly to this point.

Preventive of the Wheat Worm.

A correspondent of the Maine Farmer says, "Mr. Herrick of Poland, informed me that a year ago last spring, he had two and a half bushels of wheat sown on one piece---ground all alike---and on one bushel of sowing he sowed two bushels of good strong ashes. The ashes were sown in the time of a heavy dew, and when the wheat was just coming into blow, and sowed as much as he could on the wheat heads. The result was that from one bushel of seed he got fifteen bushels of wheat entirely free from the weevil, and from the remainder one and a half bushels, he got only five bushels of poor blighted wheat, almost wholly destroyed by the weevil or worm. The whole was sown at one time, ground manured alike, and the only difference in the management was the addition of the two bushels of ashes."

Mr. Whitmarsh—again.

Mr. Atwill—Will you allow me a small space in your paper to invite *Mr. Luther Tucker*, editor of the Genesee Farmer, to visit Northampton, and examine my plantation of mulberry trees—the produce of seed brought by me from Italy—on account of which he commenced an attack on me in his paper last winter. The trees are now in a flourishing condition and may be compared with fourteen sorts on the same ground—they will speak for themselves. I may be allowed still to express my decided preference for the sort in question. Mr. Tucker was active in getting up his evidence against me. All that myself or friends could say, appeared to have but little weight with him. It was then winter—I could bring no further evidence than my word of honor, and the original bill of seeds. I now offer to him and to all others interested in the subject, a fair opportunity of judging for themselves.

I have at great risk and expense imported every valuable mulberry, to the number of fourteen different sorts, all of which I have now growing, and with all of which I now challenge a comparison. Mr. Tucker came boldly forth, accusing me of *fraud* and *deception*. I now as boldly call on him to prove if he can, the truth of his accusations. It was a very serious charge to make—I would now seriously pursue the subject to the end. The public can take no interest in the matter; I must apologize for thus appearing before it. But I assure you I have a very deep interest in it—and in justice to myself I would call on Mr. Tucker to endeavor to obtain such information as shall convince him that he was in error and by persevering in that error he has greatly injured me.

That the hard times may not be an obstacle in the way of his coming, he is authorized to draw on me at sight, for the amount of his expenses.

Respectfully,

SAMUEL WHITMARSH.

Northampton, Aug. 24, 1837.

The above call from Mr. Whitmarsh, renders it necessary, unpleasant as the task certainly is, for us again to revert to the charges heretofore brought against Mr. W. in this paper. We had hoped that Mr. Whitmarsh, for his own sake, would not again have appeared before the public till he could have furnished such facts as would tend to do away the feeling existing in the public mind detrimental to his character in relation to the transactions alluded to. He either misunderstands or wilfully misrepresents the question at issue between us. From a statement of facts published in this paper on the 3d of December last, we inferred as follows:

1st. That Mr. Whitmarsh, by his agent, C. P. Huntington, had advertised and sold, under the name of *Chinese* Mulberry, a seed which he knew was not the *Morus multicaulis*.

2d. That taking advantage of the desire of the public to procure the seed of the Morus multicaulis, he has sold large quantities of this spurious seed, at the enormous price of *Four Hundred and Eighty Dollars per pound*.

3d. That the seed sold was nothing more or less than the seed of the White Italian Mulberry, (or a variety of no more value,) and was worth *fifty cents an ounce*, instead of *thirty dollars the ounce*, the price at which he sold it.

To the first and second of the above inferences, no contradiction has *ever*, to our knowledge, been made, in all that has been written upon the subject, with the exception of the single assertion of Mr. W. himself, that the seed was not sold as that of the multicaulis, while we have shown by the statements of the purchasers themselves, that they bought it as such, and Mr. W.'s agent, Huntington, acknowledged the deception practiced in the advertisement, and that he himself was deceived by it. We cannot, therefore, retract either of those inferences, without doing injustice to our sense of right, inasmuch as we have seen no testimony calculated in the least degree to weaken the evidence by which they are supported.

The third inference was founded on the statements of the gentlemen who had sown the seed, and compared the product with the White Mulberry. If they were mistaken, and the plants shall prove of more value than those of the White Mulberry, it will only show that they erred in their estimate of the value of the plant; and that they were not quite so badly imposed upon as they supposed. But should these plants prove of equal value as the multicaulis, (which we by no means admit) it could not in our opinion justify Mr. W. or clear him from the charges contained in the first and second inferences, because the seed was not what the purchasers wanted, and they would not have bought it had they known what they were purchasing.

Since the receipt of the notice copied above from the Northampton paper, we have examined in company with Mr. Rowe, the proprietor of the Monroe Nursery, the product of the seed he purchased of Mr. W. and compared it with the White Mulberry, and neither of us could discover any perceptible difference. The product of the seed sown by Reynolds and Bateham, was transplanted last spring with a lot of the White Mulberry, and though they intended to have them kept separate, they were not marked, and the person who transplanted them having forgotten on which side of the field they were placed, we were not able to distinguish any marked difference in the lot so as to decide which were from Mr. W.'s seed. From the specimens therefore which we have examined, we see no reason to alter our opinion in relation to the third inference.

One remark in relation to the above notice of Mr. Whitmarsh, and we have done with the subject. It will be seen that he calls on us to hunt up such information as will disprove our own statements. This, with all deference, we decline doing; but we assure Mr. W. that it will give us unfeigned gratification to lay before the public any *facts* which *he* may be able to produce, to disprove the inferences drawn from the facts we have heretofore published. We have no feeling of ill will against Mr. W. or his agent, notwithstanding the bad temper which has been manifested toward us; but, however gratifying it would be to us to see him exonerated from all blame in the transactions alluded to, we cannot consent to pronounce him innocent so long as the statements of such men as Messrs. Rowe, Reynolds & Bateham, Cheney and others, remain uncontradicted.

Coccus Malus, or Apple-tree Louse.

Most of our fruit trees, the apple particularly, is liable to suffer severely from the attacks of a parasitical insect, called, from the tree on which it is most generally observed, the apple-tree louse. If a tree looks sickly, the leaves yellow, the limbs crooked and knotty, and the bark black and rough, examination will usually show a multitude of small elongated oval scales or rounded bodies, adhering closely to the bark, and presenting no indications of any external organs. These are insects of the genus Coccus, the *proga linsectes* of Reaumur; and it is to their presence that the condition of the tree may most usually be atributed. There are several kinds of the Coccus, which are of great use in the arts, such as the *Coccus Ilicis*, used extensively for coloring red, and found principally in Spain—the *Coccus Cacti*, or the celebrated cochineal of South America, is another;—and the substance called *lac*, the base of *lac lake*, and *lac dye*, of such importance for a variety of uses, is produced by an East Indian variety of the same insect. One million five hundred thousand pounds of the cochineal insect alone have been sent from South America to Europe in a single year and valued at about ten millions of dollars.

According to Wilson, it is to Reaumur that we are indebted for a complete history of the life and transformations of the European or common coccus, the same that infests our fruit trees, and produces so much injury. The larvæ of both male and female, on quitting the egg, are tolerably active, and run about among the leaves and branches. They are, however, at that period so very small, as not to be distinctly discernable without the aid of the microscope. The male of the coccus has no apparent organs of mandducation; but the female is furnished with a small conical beak, nearly perpendicular in its direction, and composed of a four jointed sheath, containing a sucker of three pieces, and it is with this instrument that they pump the juices of the branches or leaves on which they fix themselves. After arriving at a certain size, they become definitely fixed in some chosen spot; where they, the females, attain the perfect state, but remain apterous, or without wings, even in that otherwise complete condition. When the insect has obtained its full growth, its abdomen is found filled with numerous minute eggs, over which the immoveable or cocoon-like covering formed by the body of the parent forms a safe and complete covering. Though excluded from the body, the eggs do not appear externally, but are made to pass between the abdomen and the substance on which the insect is fixed. In proportion as the abdomen becomes empty its lower surface approaches the upper one, so as to leave beneath the body a cavity or arch, for the reception of the eggs. The perfect female never moves from the chosen spot during her life; but having laid her eggs she dies, while her body hardens and thus forms a sufficient protection for her young. These, as soon as hatched, which is in the spring of the year, make their way from beneath the dead body of their parent, the carcase of which remains, giving the bark the black and unsightly appearance which trees infested with this insect, are sure to have.

It is of course the females, after they have become definitely fixed, and have perforated the bark of the tree with their sucker, which do the mischief, so often observed in orchards and nurseries; the young tender trees, with the accuracy of instinct, being selected, as furnishing the greatest supply of juices, and those the most easily obtained. We have seen some notices of this insect, in which the damage done to the apple-tree, was attributed to the scaly crust which will remain when the insect is abundant, and which was supposed to 'bind the bark,' and thus prevent the circulation of the sap. This crust may not be without its effect, as it can be clearly shown that no tree with a dirty diseased bark can flourish as well as one in which the delicate covering provided by nature is in a proper situation to perform all its functions; but we think that any one who will take the trouble to examine the bark of the infested tree, if with a glass so much the better, will readily see that the great difficulty in the way of proper nutrition is found in the abstraction, and possible deterioration of the sap, by the living insect. It will at once be seen by a little black speck immediately under the head of the insect, and these spots will be numerous in proportion to the number of the animals, that the bark has been perforated by the sucker of the coccus, and in some places these perforations are so numerous as render the bark to a considerable extent dark and dead. We have seen in nurseries many young apple-trees entirely destroyed by this cause, and the dwarfed, stunted aspect of many orchards, clearly indicate that they are extensively affected.

There is an insect closely allied to the one we are describing, called *Aphis lanate*, or American blight, which fixes itself on the bark and sucks the vital juices of the tree in the same way. Its general habits are much the same as those of the common apple-tree louse; but it is readily distinguished by the greater size of the scale or horny covering, and by the exudation from the body of a cottony looking substance, to which the young attach themselves, and then blown about by the winds, fix themselves on the branches where they chance to alight. This insect, notwithstanding its name, is not a native of this country, but imported from Europe on fruit trees, and here, as there, promises to be one of the greatest scourges of the fruit orchard.

Various remedies have been proposed for the destruction of these insects,—and an application fatal to one kind would be equally so to all the varieties,—such as rubbing the trees with train oil, washing them with soap suds, going over them with lye, and finally whitewashing them. Train oil we have never seen tried; but though it might kill the insects, we should be apprehensive, from its gluinous nature, that it would be injurious to the tree. Soap suds, especially if the tree and branches as far as practicable be well rubbed, are decidedly beneficial; but we should place the most dependence on lye or lime. Either of these will destroy every insect it covers, and in no instance have we known any injurious effects to arise from the application. A washing of this kind, with lime

or lye, occasionally, gives a smooth clean bark to the trees; and if all the branches cannot be reached, when the body and larger limbs are kept free, very injurious consequences rarely ensue.

Wheat Crop in Maine.

A large proportion of the population of Maine are engaged in the lumber business; and as a natural consequence agriculture is at a very low ebb in a large part of the state. Notwithstanding the natural fertility and productiveness of the soil, a large portion of their bread was imported from other states, the sum thus expended varying from one million to one and a half million of dollars. Sensible that this was a losing course, and that nothing was wanting to produce their own bread, but to turn the attention of the population to the culture of the soil, a few patriotic citizens of the legislature proposed, and carried through that body, a law, giving from the treasury of the state, two dollars for twenty bushels of wheat, and for all quantities more than this, six cents per bushel. The effect has fully justified the anticipations of the friends of the law. Large quantities of wheat were sown, and competent judges estimate this year's crop at 2,500,000 bushels. We rejoice at this result, though much of the flour required in Maine, went from New-York, as every such step furnishes another instance of the benefits of agriculture, and another proof of the capabilities of our country.

Churning.

There is sometimes considerable difficulty in making butter from cream, owing perhaps to causes not exactly understood; and every dairy woman knows that cases occur in which the manufacture of a good article is impracticable. A friend assures us that in ordinary cases the difficulty is at once removed, and butter of a good quality procured by the addition of a little *sal eratus* to the cream. We have since tried it when cream proved refractory, and found it to succeed admirably. A spoonful of sal eratus, pulverised, is a sufficient dose for two gallons of cream. After the cream has been churned a proper time, if no signs of butter appear, sprinkle the powered sal eratus over the surface, half at a time, as it is possible no more than half may be required. After churning a few minutes longer, if necessary, add the remainder. The philosophy of the matter, we take to be this;—the alkali of the sal eratus neutralizes the superabundant acid of the cream, and thus produces butter.

Bone Dust.

Mr. Colson of Baltimore, has erected machinery for the express purpose of grinding bones for the purpose of manure, the first instance of the kind we believe in this country, though mills for the manufacture are common in England. The Baltimore Farmer says..." We learn that those gentlemen who have tried this manure speak in the highest terms of its fertilizing effects; but how could it be otherwise, when bones consist chiefly of lime and oil, in such beautiful proportions, as to give to both their highest capacity for imparting fruitfulness to the earth? We understand by a friend, that the largest portion of the bone dust manufactured by Mr. Colson, is bought for the New-York market, where its virtues being better known, are more generally appreciated."

Danger to Barns from Lightning.

The reader will remember that we recently called the attention of farmers to the fact that barns are much more frequently destroyed by lightning than other buildings, and urged the necessity of providing them with suitable protectors. The newspapers have furnished ample testimony to the justness of our conclusions. A Philadelphia paper states that no less than five barns were destroyed in Adams and York counties, in a single storm of the 17th July. They had just been filled with the hay and grain harvest, and the whole was totally consumed. It cannot be too deeply impressed upon the farmer's mind that the columns of heated air rising from a newly filled barn, furnish one of the best conductors of electric fluid in the world, and should be counteracted by the aids philosophy and science have provided. A conductor properly placed on a barn, or if large, one at each end, would cost comparatively nothing, and may save thousands of dollars.

Elder Bushes,

"Are stubborn and hard to subdue, yet I know by experience, that mowing them five times a year will kill them." So says an extract in one of our journals, and we believe it; because we have repeatedly killed small patches of the Canada thistle, by cutting them close to the surface of the ground, several times a year. In this case a sharp instrument such as a knife, will do the business more certainly than a dull one, like a hoe. The grand secret in the destruction of all weeds is, to allow no leaves to form, and of necessity the plant must die.

Cherry Trees.

The New England Farmer gives the following extract from an old book published in London, in 1657. "Cherry trees cannot away with dung; if therefore you dung their roots, they degenerate; they prosper well, if you cut off the branches of them, and bury them by the roots that they may corrupt or rot there. They grow without stones, if you cut off the tree when it is young, about two feet from the ground, and pick out the pith of it with an iron, clearing the stock, and bind both parts together again." Cherries without stones would be a treat; and we shall probably see them produced in this way, when we grow coreless apples by inserting grafts with the top end downwards according to a prevalent opinion.

Preparation of Poudrette.

We are much pleased to learn from the Long Island Star, that Mr. Minor, the enterprising publisher of the New-York Farmer, and other valuable works, in conjunction with Mr. Barthlemy, a French gentleman acquainted with the method pursued in Europe, have made arrangements for establishing a manufactory of this most valuable manure, the materials for which can be procured in any desirable quantity in New-York. We trust they will be successful, as they will not only remove from the city and its precincts what has proved a serious nuisance, but confer upon agriculturists the means of procuring one of the most valuable of manures.

Fattening Swine.

The Rev. Mr. Elliot observes as follows: "I find by experience the best time to fatten swine, is to begin the first of Ausust, if you have all corn. Hogs will fatten *slowly* in cold weather; they will eat much and fatten little; if you make a very warm house, they will heat in bed, and catch cold when they come out into the cold air." Mr. Elliot is undoubtedly correct; and if a farmer has not old corn, he should have new peas fit for feeding by the first of September. If thrown to your swine when rather green, vines and all, there are few kinds of feed more palatable to a pig, or which will give a finer beginning for the manufacture of heavy pork.

☞The seeds sent us last spring by Mr. Wetmore of Ohio, were received. We gave some of them to a number of our subscribers. Those we planted were destroyed by insects, so that we shall be glad to receive some of them next spring, if they can consistently be sent.

"The Buckeye Plough Boy," is the title of a Monthly sheet, 16 pages octavo, issued at Cuyahoga Falls, Ohio, by *Richard Fry*. The first number promises well. [Price 60 cents a year.

Objections to Agricultural Improvement.

The following is an extract of a letter from a subscriber to the Genesee Farmer in Erie county:

"However strange it may be, such is the fact, that too many of our farmers are opposed to improvements. I can well remember the wise observations made on the Patent Plough when first introduced; and he that was first to purchase it in his neighborhood was ridiculed, and so strong was the prejudice against them in the neighborhood where I then lived, that the first Patent Plough was used from necessity, as the person could get no other. A few of these having been left at a store for sale, he ventured to use one rather than not do his ploughing in season; and after using it from necessity, he ever after used it from choice, and by degrees his neighbors procured and used them; and now look upon the old fashioned Bull Plough with wooden mould board, as an article no longer fit for a farmer.

Thus one improvement after another has been forced upon our farmers. The Patent Plough, the Thrashing Machine, the Cultivator, Drill-Barrow, Horse-Rake, &c., all in their turns have been forced into use by the inventors; and the door for improvement is still open, and I fully believe that steam will be applied to agricultural purposes. I can see no reason why it cannot as well be appplied to the plough as the transportation of goods, &c.

"Our farmers do not sufficiently reflect that almost every other branch is far outstripping them in improvement, and unless they put their shoulder to the wheel, and make a united effort, they will be left in the back ground. If you suggest to a farmer the propriety of some or all of his sons procuring some knowledge of Chemistry, he will say "poh! that's for the doctors — I do not want my boy's heads full of such stuff—I cannot see what chemistry has to do with planting and hoeing corn" That is true, he does not see, and what is more, he is determined he will not see, nor let his children see. It has not entered his mind, that our soils are composed of various ingredients, and that there are proper proportions necessary to the production of vegetation; but what that proportion is, he seldom or never thinks—of the qualities of his manure his knowledge is limited to its visible effects—he knows nothing of the salts it contains and the gasses that escape—whether they are beneficial to the growth of vegetables and should be preserved, or whether they are detrimental and should be permitted to escape before using—in fact, there are none of the sciences but a partial knowledge of them would be as beneficial to the farmer as any other branch of business—and his situation and pursuits are well adapted for study and improvement. Sufficient time for reading on rainy days and long winter evenings, sufficient capacity to digest what they read, and what is still better, their minds are free from the excitement and embarrassment with which the merchant or mechanic are continually harrassed, and I am at a loss conceive how a farmer can get along comfortably without taking an Agricultural paper."

Early Corn.

Mr. Tucker—By the kindness of Mr. Isaac Moore of Brighton, we have been furnished with some fine specimens of the early 12 Row, or Dutton corn, the growth of this season, well filled, and perfectly ripe. They were gathered about a week since, from three different farms in the town of Arcadia, Wayne Co. The grower of one of the samples, we are informed, planted his corn early in May, and it was sufficiently ripe to be cut off the ground on the first of September, thus leaving the ground in good time and in good order for a crop of wheat.

The uncertainty and frequent failure of the corn crop of late, renders it extremely desirable that some variety should, if possible, be introduced into general cultivation, which would require less heat and shorter time to come to perfection, than our cold summers and untimely frosts will afford, or than the kinds usually cultivated seem to require.

The corn crop is one of great importance to the community, and a deficiency or failure of it, is a severe loss to the farmer as well as a great public calamity; therefore, all who contribute to obtain and diffuse such seeds, or such information as may tend to prevent this catastrophe, are eminently benefactors of the public.

We would particularly request all our agricultural friends who have fine crops of any articles which are likely to be wanted for seed, to send us the information early, that we may know where to procure any supplies which may be wanted. It will afford us much pleasure also, to receive and exhibit any new or choice specimens of grain, seeds, vegetables or fruit, that they may see fit to favor us with. Respectfully yours,

Reynolds & Bateham.

Rochester Seed Store, Arcade Hall, Sept. 20, 1837.

COMMUNICATIONS.

Rust or Blight.

Mr. Editor—The unprecedented loss sustained by the wheat growers of this country from this cause, will unquestionably, as it should, direct the attention of those interested to an investigation of the matter, in the hope of discovering some remedy for so serious an evil. I am glad you have called on your able list of contributors for information, and trust the call will be cheerfully and promptly responded to by them. Without any pretensions to rank with such, I may be permitted the yankee privilege of guessing at some things connected with rust on plants, or asking a few questions.

Men acquainted with the natural sciences, have given a place, as stated in your paper, to rust, among the parasitical plants, or such as spring up and grow on the bodies of others, like touchwood, and the mosses. It seems to me that this has rather been taken for granted than proved; and that there is quite as much probability in the old common sense notion of farmers, after all, as in any of the fine spun theories that have been advanced; and this notion is as you state, that under peculiar circumstances the stem cracks open, the juices exude from these openings, and the grain as a natural consequence withers.

Let us see what would be the natural process to produce such a result; and how far it differs from the actual facts of the case so far as they can be ascertained.

In the first place it is evident there must be a superabundance of juices collected in the plant; the vessels must become as it were gorged, before the cracking of the stem, or the exudation of the sap can take place. To produce this state of things, all the circumstances favorable to a rapid growth must be present; there must be abundant moisture to furnish the required supply of fluid, and there must be heat to force it into circulation, and draw it in unwonted quantities upwards through the pores or vessels of plants. It is under the forcing influence of combined moisture and heat, that vegetation in the torrid zone makes such gigantic strides, and when the same causes are brought to operate on plants whose habits are inconsistent with such an expansion, can it be wondered at that disease or death should ensue. That rust never takes place, unless preceded by unusual moisture and heat, precisely the conditions required above, no one acquainted with the subject will be disposed to deny.

In the second place, heavy and continued rains are necessary, to soften the cuticle, or skin of the plant, before it will give way to the accumulated internal pressure. The strength of the epidermis of plants depends in a great degree on the gum which is combined with the fibres, and that this is softened and dissipated by the application of moisture in large quantities is evident to all. When this covering is weakened at the same moment, and by the same causes that increase the internal pressure, ruptures take place, and the liberated fluids continue to flow through the opening so made. The common blue plum furnishes an illustration of the effect of this weakening of the texture of the skin, familiar to all. Nothing is more common, than after severe showers, especially if accompanied by warmth, to find many of these plums, when nearly or quite ripe, cracked open on one or both the sides; and I have this day seen numbers of the black Morello cherries that have cracked open, in consequence of the repeated showers of the past few days.

We thus see that the combined influence of moisture and heat is sufficient to produce the cracking of the stem necessary in the common theory of rust; and this once taken place, all the other results and appearances, such as the discoloration and death of the plant, and shrinking of the grain, can be satisfactorily accounted for. It has been said that since the juice of the plant when exuded is nearly transparent, it is irrational to suppose that the reddish or dull coloured substance found on affected wheat, can spring from that cause. I answer it is no more irrational to suppose this, than it is to suppose that such dark colored masses as opium, or gum elastic, can proceed from the milky fluid exuding from the ruptured buds of the poppy or acacia. I have now before me a stalk of wheat badly diseased, and showing multitudes of those dark colored protruding lines called by botanists the fungus *uredo linearis*, but which the theory I am now supporting, supposes to be nothing more than the thickening juices of the plant, escaping through the ruptured envelope, and dried and blackened in the sun, as in the case of opium, or the colored gums. Besides, the stalk, where it does not show the longitudinal traces, is covered with a yellow stain, as if washed with a solution of gamboge or yellowish varnish, and a microscope shows this stain apparently to be a filmy covering of the same nature as the thicker masses of rust, but spread by the rain over the surface of the plant, as it exuded from it.

I wish, Mr. Editor, to repeat, that in making these remarks, I have nothing in view but the elucidation of truth; I have no favorite theories to support, and if I, and those who think with me, on the nature and origin of rust, are in an error, we shall be most happy to be set right. The question is one of great practical interest to the community of farmers, and as such should be treated fairly and frankly.

M. D.

Select the Best Seed Corn.

It is highly important that your seed corn should be selected from the best samples which can be obtained, as the off-spring, whether vegetable or animal, will, in a great degree, partake of the good or bad qualities of the parent. The following directions on this subject, are from a scientific and practical agriculturist:

"When the first ears are ripe enough for seed, gather a sufficient quantity for early corn, or for re-planting; and at the time you would wish your corn to be ripe, generally, gather a sufficient quantity for planting the next year, having a particular care to take it from stalks which are large at the bottom, of a regular taper, not over tall, the ears set low, and containing the greatest number of good sizable ears of the best quality; let it dry speedily; and from the corn gathered as last described, plant your main crop, and if any hills should be missing, re-plant from that first gathered, which will cause the crop to ripen more regularly than is common, which is a great benefit. The above-mentioned plan I have practiced many years, and am satisfied that it has increased the quantity and improved the quality of my crops beyond what any person would imagine, who has not tried the experiment."

Dr. Deane observes that "some recommended gathering seed corn before the time of harvest, being the ears that first ripen. But I think it would be better to mark them, and let them remain on the stalks till they become sapless. Whenever they are taken in, they should be hung up by the husks, in a dry place, secure from early frost, and they will be so hardened as to be in no danger of injury from the frost in winter."

The manner in which Mr. Thomas N. Baden of Maryland, improved his corn, commonly called the "Baden Corn," is given in the N. E. Farmer of March 1, 1837, vol. xv. p. 265, by Mr. Baden himself. As this may not be in the possession of some of our readers, we will quote that part which illustrates the principle of improving plants, by selecting their seeds from the best specimens:

"I have the pleasure to say that I have brought this corn to its high state of perfection, by carefully selecting the best seed in the field, for a long course of years, having especial reference to those stalks which produced the most ears. When the corn was husked, I then made a re-selection, taking only that which appeared sound and fully ripe, having a regard to the deepest and best color, as well as to the size of the cob. In the spring, before shelling the corn, I examined it again, and selected that which was the best in all respects. In shelling the corn, I omitted to take the irregular kernels at both the large and small ends. I have carefully followed this mode of selecting seed corn for *twenty-two* or *twenty-three years*, and still continue to do so.—When I first commenced, it was with a common kind of corn, for there were no other in this part of the country. If any other person undertook the same experiment I did not hear of it; I do not believe thers ever exercised the patience to bring the experiment to the present state of perfection. At first I was troubled to find stalks with even *two good ears* on them, perhaps one good ear and one small one, or one good ear and a "nubbin." It was several years before I could discover much benefit resulting from my efforts; however, at length the quality and quantity began to improve, and the improvement was then very rapid. At present I do not pretend to lay up any seed, without it comes from stalks which bear four, five or six ears. I have seen stalks bearing eight ears. One of my neighbors informed me that he had a single stalk with ten perfect ears on it, and that he intended to send the same to the museum at Baltimore. In addition to the number of ears, and of course the great increase in quantity unshelled, it may be mentioned, that it yields much more than common corn, when shelled. Some gentlemen in whom I have full confidence, informed me that they shelled a barrel (10 bushels of ears,) of my kind of corn, which measured a little more than six bushels. The common kind of corn, will measure about five bushels only. I believe I raise double, or nearly so, to what I could with any other corn I have ever seen. I generally plant the corn about the first of May, and place the hills five feet apart each way, and have two stalks in a hill.

* * * * * * * *

"Early last spring, I let George Law, Esq. of Baltimore city, have some of this seed corn; he sent it to his friend in Illinois, with instructions how to manage it. A few weeks since, he informed me that the increase was 120 bushels to an acre; that there was no corn in Illinois like it, and that it produced more fodder than any other kind. I have supplied many friends with seed corn, but some of them have planted it with other corn, and will, I fear, find it degenerate.

"I have lately been inquired of, if this corn was not later than any other kinds? It is rather earlier, certainly not later. Corn planted in moist or wet soils, will not ripen so quick as that which is planted on a dry soil. In the former there will be found more dampness in the cob, although the kernel may appear ripe in both. In the two last years, the wet seasons have injured much corn that was early lofted or housed."

It appears from the experiment of Gorham Parsons, Esq., that the Baden corn, under that gentleman's skillful treatment, grew very large, but is late, and it is doubtful whether it will ripen sufficiently to germinate another season. The same thing would take place in all *southern corn*. Probably our shortest as well as surest way to improve our northern corn, would be to plant the Lathrop, the Dutton, the Canadian, or some other early sort of corn, and improve it by selecting the best samples, and adopting the same process, so successfully pursued by Mr. Baden, as above detailed.—*N. E. Farmer.*

Morus Multicaulis.

The superiority of this mulberry, for feeding silk worms, is known to every one who understands its proper cultivation; and all would give it the preference to any other variety of the mulberry, if they could be assured of its enduring the rigor of our winters. Upon this point there have been different opinions by practical cultivators, arising from their different methods of cultivation. Most persons who have had trees, have been induced, from their great demand, and the prices they have brought, to propagate them as fast as possible, by placing them in their gardens and richest grounds, and forcing their growth by repeated cultivation, through the season till checked by the frosts of autumn, before the wood is matured, and while the tops are green and succulent. In this state of vigorous growth, they have been killed as far down as the green tops extended by the first severe frosts, and the ripening of the whole tree being prevented by its late growth, the consequence has been, that during the thawings and freezings of fall and spring, it has been frequently entirely destroyed. Some few have been discouraged from any further attempts, after meeting with such disappointment at the outset, not being aware of the fact that few of our native forest trees, if there are any of the same rapidity of growth, would be capable of withstanding the winters, after the same cultivation. Another mode of cultivation has met with better success—where the trees have been put on light, high, and dry soil, and hoed but

little during the season; they have become matured before the severe frosts, and have stood the winters with only the loss of the extreme ends of the tops and branches. But few, however, have practiced this, because the tree would not grow as large, and consequently would not be multiplied as fast.

Another method, and decidedly the best where it is intended to let the trees remain on the same ground, which must be where the water will run off in the winter, has met with entire success. It is to cut them down to within a few inches of the root in the fall, and cover with old leaves, or litter, or by hauling the earth around them. In the spring, numerous thrifty sprouts will shoot up, and produce more foliage than the old stalk if it had remained unscathed by the winter. The old stalk and branches taken off in the fall, may be preserved for cuttings, by burying them them in sand in the cellar.

When it is intended to multiply the tree and at the same time get the greatest amount of foliage, we know of no better method than the one we have practiced this season. The first week in May, we prepared the ground, by ploughing and harrowing, drew light furrows, two and a half feet apart, and three inches deep, and threw in the trees, one at the end of another, lengthwise of the furrows, while a man followed with a spade, and struck in beneath the root, to let it a little deeper, throwing the earth on the roots, and treading it firmly down; another followed with a hoe, and covered the entire tree, from half an inch to an inch deep. In about two weeks, the sprouts began to come out of the ground and new ones continued to appear for two months afterwards; they were carefully weeded with hand and hoe twice, and afterwards, the ground being very weedy, hoed once a week till August; each time hilled a little; the old stalk being now covered about three inches. We commenced picking leaves when they were less than a foot high, and have continued to do so to the present time, always taking off the lower leaves, and never leaving less than three or four at the top of the main stalk and branches. We have fed one crop of worms on the common, and are now feeding another of the two crop variety. The cocoons of the first crop reeled exceeding well, producing strong, elastic, and lustrous silk.

Our cuttings were put out soon after the trees, of one bud only, each cut off half an inch above the bud, and pressed perpendicularly into the ground, even with the surface, in drills one foot and a half apart, and six inches from each other. They were afterwards treated the same as the layers except, being less hilled up. The leaves have been picked from them for feeding, as well as for the purpose of admitting the sun to the wood, which, in our opinion promotes their growth, and hastens their maturity. Those from the layers are now from two to five feet high, with branches two and a half feet, and leaves which have measured fourteen by eleven inches; some of the cuttings are three and a half feet high. The trees were of good size when put out, which we consider necessary to produce large trees the first season. Many gentlemen acquainted with trees, have pronounced them the largest they have seen in the Northern States, and every one who has looked at them has become convinced that if the Morus multicaulis had to be put out in this manner every year, it is decidedly more valuable than all other varieties of the Mulberry. The great amount of foliage which can be obtained from them the first season, and the facility of gathering it are considerations of great importance to those engaged in the culture of silk.—*Silk Culturist.*

Tomato a Substitute for Calomel.

We have been looking for this, these two years past, and were wholly inclined to favor the announcement, when a few weeks since we saw advertised, "Miles' compound extract of Tomato." The tomato, used as an article of refection, is highly medical, and doubtless prevents many bilious attacks.—We inferred from this fact the possibility of preparing from it a medicine of great virtue. Dr. Miles and his associates have spent years, and fortunes, we understand, in experimenting, and finally have produced the compound extract. It has been used by many, in the city and out of it, and is, as near as we can learn generally approved. The following is taken from the advertisement and directions accompanying the boxes:

"Humane physicians deplore the sad evils resulting from the mercurial practice, and will gladly hail the introduction of an article that can safely be substituted for calomel. They *feel*, and that *keenly*, the great uncertainty of its primary operation; they cannot say whether it will be favorable or unfavorable. They also *know*, and feel, that if its use is continued for any considerable time, injurious secondary consequences must certainly follow. But they must choose the least of two evils; they know no other article that will arouse a *torpid liver*, remove obstruction, and set in free action the whole glandular system; and it being indispensably necessary to do this, they continue its use, notwithstanding the evil consequences which follow.

They have long desired and sought an article that would produce the *good* effects of this drug, without subjecting the patient to its *deleterious* results. Such a desideratum, it is believed, has at length been obtained in the article now presented to the public.

"The proprietors of this article, keeping in view the fact, that a *wise* and *benevolent Being* has placed within the reach of all, remedies adapted to the diseases incident to the climate they inhabit; and knowing likewise, that most of the diseases of the *south* and *west*, are based upon organic or functional derangement of the liver; directed their attention to those articles which act more especially on the biliary organs.

"After long, laborious, and expensive research, they have succeeded in extracting a substance from the *tomato*, which from its peculiar effect upon the the hepatic or biliary organs, they have denominated *Hepatine*.

"It is a medicine that will produce all the beneficial results of calomel, in both acute and chronic diseases, without the possibility of producing the deleterious consequences common to that article."—*West. (Cinn.) Christian Advocate.*

The Tomato.

As this is the season when this delicious and healthful vegetable is ripening and becoming fit for the table, a word to those who may be unacquainted with its highly valuable medicinal qualities, may be acceptable. In all complaints attended with torpor and inactivity of the liver and bowels, it is a speedy and sovereign remedy; for sick head-ach, do.; for dyspepsia it never fails. For all calculous complaints, and diseases of the kidney and urinary passages, it is worth more, and will do more good, than all other medicines put together, not excepting even Swaim's nostrum or Brandreth's *inert* pills. For scrofulous diseases generally of the glandular system, it is one of the best remedial agents that can be found, if not the very best. All diseases of an occult nature, requiring the aid of mercury in some form for their cure, will yield more readily to the free use of the tomato; and what is greatly in its favor, it does not like mercury, ninety-nine times in a hundred leave a more obstinate disease behind, and one more incurable than that sought to be removed. For the *modus operandi*, we must content ourselves by saying that the tomato acts as a detergent or wiper away or crude and irritating humors floating in the system, and which frequently become entangled in the tortuous vessels of the glands, and there, if not removed, are sources of constant irritation and frequent disease. As a diuretic, it is not excelled by any known medicine; hence its efficacy in all dropsical affections. But time would fail me to enumerate all the diseases in which its virtues as a remedial agent have been tested. For the different modes of preparation for the table, and for preserving it through the winter, I must refer you to the Genesee Farmer.—*Lockport Democrat.*

From the Farmer's Register.

The difference between using Bricks in the Dry or Wet state for Masonry.

Proprietors who are about to have brick buildings erected, will do well to attend to the following statement—the purport of which is almost universally neglected, even by the few persons who are fully aware of its importance.

"Few people, except builders, are aware of the advantage of wetting bricks before laying them. A wall 12 inches thick, built up of good mortar, with bricks well soaked, is stronger in every respect, than one 16 inches thick, built up dry. The reason is, that if the bricks are saturated with water, they will not abstract from the mortar the moisture which is necessary to its crystallization; and, on the contrary, they will unite chemically with the mortar, and become almost as solid as a rock. On the other hand, if the bricks are put up dry, they immediately take all the moisture from the mortar, and leave it too dry to harden, and the consequence is, that when a building of this description is taken down, or tumbles down of its own accord, the mortar falls from it like so much sand."

Masons or bricklayers are sufficiently well informed on this subject; but it would seem that they care very little about the durability of their work—and there is at least one reason why they are very unwilling to use bricks in a proper state. Bricks, to be saturated, will absorb so great a quantity of water, that their weight becomes greatly increased, and consequently the labor of handling and laying them. And unless proprietors were willing to make a considerable addition to the price paid for laying dry bricks, the workmen would be greatly the losers by the change.

The proof of the above position may be seen in almost every instance of the pulling down of a brick house, of modern and ordinary construction. The bricks which form the walls above ground are easily detached from each other, and cleared of the very weak and crumbling cement between; while in the walls of the cellar, or of the foundation courses, which were always in contact with moist earth, and therefore the bricks were kept moist, they are so closely cemented together, that they can scarely ly be separated and cleared of the mortar.

The necessity of keeping up moisture until the cement has had time to "set," is seldom more regarded in the plastering of houses. This operation is often executed in the hottest and dryest weather, so that all the moisture of each coat is evaporated in a day or two. Theory would inform us, that if laid on in damp and cool weather, or after the close of summer, that plastering would be far more solid and durable.

From the Silk Grower & Agriculturist.

Draining Swamps.

Mr. Cooke, Sir:—I notice you have at the request of Mr. S. Woodward, Jr., extracted from the N. H. Sentinel, a communication of mine upon the culture of swamp land, accompanied with some queries, which I regret I have not found leisure sooner to answer.

As respects the depth of mud in the swamp, I am perhaps unable satisfactorily to answer, however, it is very deep and the shores bold; I have cut a ditch on the shores generally about a rod from the hard land—the mud there is usually from 3 to 4 feet deep. I recollect trying to ascertain the depth of the mud in the centre of the meadow, and put down a pole 13 feet, but found no bottom. As to what are the specific properties of the substratum, so far as I have examined, it is rocky; the top a white sand, and almost impenetrable.

Respecting, cutting it into small pieces by ditching, I do not think it is necessary; but when I commenced the culture of the swamp alluded to, I had no fixed plan or intention, as to what portion or how much I should improve; therefore cut it into such pieces as my time would permit, making use of such intervals of time, as could be spared from the ordinary labors of the farm. I am of opinion, however that in all cases it is better to err, if error it is, in cutting too many ditches, than too few. I do not keep all the ditches open, but find it necessary to open more or less of them every year, sledding the mud into my barn-yard, which proves valuable for manure. In answer whether water continues in the ditches through the season? It does generally although there is not much current running in the driest part of the season. The water is seldom nearer the top of the swamp than 15 inches, or sinks lower than 24 or 28 inches from the top. Respecting springs in and about the swamp, there is not any in the swamp that I have ever discovered, and but few near it. As to what was the variety of timber originally growing upon it, it was black ash, white maple, black and yellow birch, some spruce and a few large white pines.

As respects my views of reclaiming swamps, profits, &c., I would lay down as a general rule, that a large ditch should be cut so as to completely en

circle the swamp, varying from one to two rods from the shore (depending on the depth of the mud,where the mud is deep one rod will do) so as to cut off entirely all the springs if any there are. The bank should be thrown towards the shore and spread which answers for a soil. There should be a large ditch cut through the center (unless it is very narrow) so as to completely drain the swamp to the depth of 20 inches or 2 feet. There should also be cross ditches or under drains as often as one in every 8 rods. I would recommend under draining where the swamp is near the plough-field, which should be done by cutting a ditch or drain about 3 feet deep. 3 wide at the top and 2 feet at the bottom, fill it within one foot of the top of the swamp with small stones from the field, cover them first with shavings of some substance so as to prevent their filling up with mud, and spread the mud back over them; or where the mud is deep small sapling pines or spruces may be laid down on each side of the ditch and slabs laid on which answer a good purpose, as they will never rot. Then if the swamp is covered with wood, brush, &c. all must be cut by the roots and carried off, or burned up, when the culture should commence by cultivating potatoes, laying the manure on the top of the swamp in preference to making any holes. After one or two crops of potatoes are taken off, it should be levelled taking out all the prominent roots, manured well with compost manure, and sown with oats and grass-seed. If the swamp is an old one, or in other words has been cleared several years and is into grass, I am of the opinion the surest and most effectual method of destroying the wild grass is by digging it up, which may be effected in the following manner. Begin on one side or edge, and cut into squares of about 20 in hes or 2 feet in diameter with a ditching knife or broad ax, take them out of the way with a large prong hook, spading up the mud 8 inches or a foot deep, then cut another tier and turn into the trench, spading the mud, and laying on the turf, taking out all the roots, and in like manner until all is done, thus creating a soil on top of the turf which will be found after freezing very easy of culture: after which it should be planted with potatoes one year, then level and seed down as in the former case. Respecting the profits, &c. I am fully of opinion it is the best land we have, and when properly managed will yield a large profit. Of the swamp that I have been reclaiming there is about six acres, it cost from 25 to 40 dollars per acre to clear, dig up &c., after which the culture is as easy as any other land. Mine has paid all the first expense of digging up, manuring, &c., and now pays the interest of more than $100 per acre over and above all expense. Last year it averaged three tons of best herds grass hay per acre, this year, it fell something short being damaged with the frost of last winter.

J. CONANT.

Jaffrey, August 10, 1837.

From the Cultivator, by G. Vanderlin of N. Y.

Important to Farmers.

In the winter of 1819, a disease prevailed among the cattle to an alarming extent; some farmers lost more than one half. I have at this time nineteen head of cattle on my farm, which were kept confined to the barn yard; they were watered at a trough standing near a log house. I watched closely those that were affected with the disorder and observed that they would very often after they had drank, turn to the old log house, and endeavor to eat the clay from between the logs, that is when the ground was frozen and covered with snow. Knowing that all animals are governed by instinct, and seldom ever eat that which is not beneficial, I determined to try the experiment—accordingly, I procured a quantity of clay, and offered it to them in pieces of a proper size, which they greedily ate from my hand; they were afterwards fed with clay twice a week until the snow disappeared, and never were cattle healthier, or in better condition when the spring opened—since then to the present time, 1836. My horses, cattle, calves and sheep, when the snow and frost has prevented them from obtaining earth or clay for themselves, have been supplied. I have fed it to calves in the spring and summer and it has never failed to restore them to their appetites, when they refuse to eat, correcting all acidities of the stomach, and stopping all scourings, as magnesia does in children. As to calves I have never lost one in winter, and of sheep not two in a hundred, since I commenced feeding on clay, and out of 140 sheep, during the last winter, I lost not one and most of them were good mutton. During the last winter the sheep of Dr. Butler, an extensive wool grower, were taken with the scours and many died, before he was aware of it; he immediately had clay dug up and thawed, and fed to them, after which he lost not another sheep. I am perfectly satisfied that it is as necessary that cattle and horses should have clay given them in winter, when the ground is covered with snow, as it is that they should have salt in summer; and as to sheep and calves I would rather mine should do without salt than without clay.

Great Sale of Imported Cattle.

The great sale of imported cattle took place at Powelton, on the 12th inst. under the auspices of Mr. Moses Thomas. Never before did we see so many vehicles together—from the little tub upon wheels, to the stately family carriage—the avenues were crowded with them; and the visiters seemed to enjoy the exhibition of each other, as well as that of the beautiful specimens of cattle paraded before them. Among the distinguished visitors to the place, we noticed the Hon. Henry Clay and his son-in-law, Mr. Irving.—*U. S. Gazette.*

The Philadelphia Ledger contains a table of prices at the sale which we copy.

COWS.

Names.	Age.	Purchaser.	Amount.
Ruth,	6 yrs. old.	J. R. Neff,	$460
Adelaide,	6 " "	do.	490
Minna,	5 " "	Clarkson,	520
Lucilla,	5 " "	N ff	480
Empress,	5 " "	Cunningham,	420
Brighteye,	4 " "	do.	490
Beauty,	4 " "	Neff	540
Vermillion,	4 " "	Wetherill,	430
Nonsuch,	3 " "	Warwick,	410
Media,	3 " "	Fisher,	380
Ruby,	3 " "	Roach,	370
Mayflower,	3 " "	Cunningham,	515
Profitable,	3 " "	Neff,	550
Clarkville,	2 " "	do	630
Virginia,	2 " "	Cunningham,	690
Woodbine,	2 " "	Robinson,	400
Belicia,	1 " "	Andrews,	450
Celebrity,	3 " "	Wetherill,	480
Isabella,	5 " "	Wolpert,	405
			$9,110

BULLS.

Hector,	2 " "	J. R. Neff,	$475
Sir Robert,	2 " "	Wetherill,	350
Melbourne,	2 " "	Sampson,	320
Maxwell,	1 " "	Canby,	400
Lewell,	1 " "	Gaskill,	210
Colostra,	1 " "	Wolbert,	260
Miser,	1 " "	Cunningham,	470
Brutus,	1 " "	Neff,	330
Delight,	1 " "	Eldridge,	370
P. of Wales,	1 " "	Kelly,	310
L'd Fairfax,	1 " "	Andrews,	250
Bruce,	1 " "	Roach,	360
Primo,	1 " "	Sampson,	310
Nimrod,	2 " "	Hunter,	470
Colossus,	3 " "	Hickman,	310
			$14,305

SHEEP.

2 Backwell Breed, at $100 each,		$200
5 " " " 95 "		475
Total,		$14,980

Measuring Potatoes.

A fact which came under our observation last spring, while buying our seed potatoes, has convinced us that it would greatly tend to promote the cause of justice between buyer and seller, as well as advance the interests of potato growers if they were sold by weight. We engaged 35 bushels from a dealer, out of a lot of 55 that he had bought. Prior to our sending for them, the dealer told us he had sold 40 bushels and wished us to take the balance; upon our remonstrating against his having sold a portion of the quantity engaged by us, he laughed and said there was more left than we had engaged, and much to our surprise, the residue measured 37½ bushels, making the 55 bought by the dealer actually contain 77½ bushels. On expressing our surprise at these facts, he stated that he had bought the potatoes in bags, and that they contained more than the *estimate* of their contents, which he had, at the request of the consignee, fixed himself. Here was a clear loss in measure to the owner of these potatoes, of 22½ bushels, whereas had the quantity been ascertained by *weight*, the *judgment* of an *interested* purchaser could have been dispensed with, and justice to the farmer would have been done. We deem it our duty to lay this statement of facts before our agricultural readers, because we honestly believe that great advantage would arise were the measures of potatoes ascertained by *weight*, instead of the loose manner of measuring in *baskets*, *bags*, and half bushels. —*Far. and Gard.*

Ploughing in Wheat.

We have long been of the opinion that the farmers of Maine did not work or stir their land enough. Mr. L. Whitman, of Winthrop, has related to us an experiment which goes to prove the importance of using the plough more, and of covering wheat when sown more effectually than it is done by the harrow. Last year he ploughed up a piece of sward land, that had become bound out, as it is called, and sowed upon it Peas & Oats. He had a fair crop. Late in the fall he ploughed the piece again. In the spring he ploughed it once more and harrowed over; he then put the plough through it again, making three time in all. When he had ploughed a part of the land the last time, he concluded to sow wheat on the remainder and plough it in. This he did and afterwards sowed wheat upon the first ploughed piece and harrowed it in. He also passed the harrow over the piece in which the wheat had been ploughed, so that the whole of the land was used alike. He put ashes to the amount of ten bushels to the acre upon the whole piece. The result at harvest was, a good crop on the whole land, but a decided advantage in the piece where the wheat was covered by the plough. It yielded more per acre than the wheat covered by the harrow.—*Maine Farmer.*

Early Cabbages.

Persons who may wish to secure for their families early cabbages next summer, should seize the opportunity now offered of sowing seed of the Early York, Early Battersea, Bullock's Heart, or any other of the early varieties they may prefer. Prepare a bed about 4 feet wide, of a length suitable to hold the requisite number of plants. The bed, prior to being dug up, should be well manured; and should you design not to plant them out this fall, by raising them out of the ground and replanting in the same bed they will answer for setting out in the spring, if you take the precaution to cover them over with pine or other brush to keep them from the frost.—The best way to do this is to place four or more forked stakes down at the corners and sides of the bed, those facing the north to be less elevated than those facing the south, so as to admit the southern air tolerably freely; place poles across these stakes, and upon these put corn stalks and pine brush.

If you design planting them out this fall, which is the best plan, run your furroughs east and west, then with a hoe draw up the earth on the northern side of the furrough, in the cavity thus formed put long manure from your stable and set out your plants on the northern side of the furrough, so as to have a southern front. In the spring when the frost is thoroughly out of the ground, draw the dirt over the manure from either side of the furrough, and this will answer for the first hilling. The subsequent workings will of course, be a matter to be determined by your own judgment.

The furroughs should be two feet apart, and the plants *one*, so as to allow for killing by the frost.

The sooner you sow your seed the better.—*Far. and Gard.*

Bakewell Rams.

Mr. *John Barney*, of Philadelphia, has a few superior *Rams* of the pure *Bakewell* or *Leicester* breed, one year old, for sale. Their sires were imported by Mr. Barney from England, and these he now offers for sale are equal in form, appearance and size, to any of this popular family of sheep raised by him—to say this is strong praise, when the deservedly high reputation of Mr. Barney as a sheep-breeder is considered. Gentlemen, who may wish to im-

prove their stock of sheep, should lose no time to secure one, as the number on hand is small. Breeders who regard the vigor of the constitutions of their flocks, always change their rams every two years, and such is the rigid observance of this rule with Mr. Barney, that he invariably sends to England every second year to procure *his* without regard to price, and hence we have one of those causes which operate to render his flock of sheep one of the best in the country.—*Far. and Gard.*

Vitality of Seeds.

We often see, when the earth has been dry to some considerable depth, that vegetables spring up and grow vigorously. And these vegetables or plants are most generally of a kind which are different from any that have grown lately in that vicinity. This is an evidence of the vitality of seeds; for these seeds must have been buried in the soil for a great length of time, and have preserved their germinating powers in a dormant state, until they were brought into a state or condition where the warmth, moisture, &c. of the atmosphere would start their germinating faculties or powers, and bring them forth living and flourishing plants. Not long since one of the ancient mounds or tumulus found in many parts of England, were opened. The skeleton or bones of a person was discovered and some seeds together with other matters, supposed to be the contents of the stomach accompanying them. Prof. Lindley pronounced the seeds to be those of the Raspberry. They were planted, vegetated and there is now a flourishing growth of Raspberries which have produced fruit. It is not certain how long these seeds have lain dormant. They are supposed to have been eaten by the individual whose remains were enclosed, and by what can be gathered from history, must have been deposited there nearly or quite TWO THOUSAND years ago. Loudon makes mention of a field that was ploughed in Dunkeld in Scotland after it had been at rest 40 years, which yielded quite a crop of black oats. Now this crop must have arisen from seeds that were deposited from oats of that kind, grown there so many years previously. We have noticed, often times, a vigorous growth of common pigweed, or goose-foot (chenopodium) upon dry gravels and sands, that have been recently thrown up from a considerable depth. We once opened a dry gravel bank, to a depth of five or six feet in the fall of the year. Next summer we had a most beautiful crop of this weed which grew to the height of from four to six feet, and that on a bed of gravel of an exceedingly sterile quality.

There are many other facts which might be bro't forward to give an interesting view of the vital power of seeds and prove that the power will lie dormant in situations suitable for their preservation. We know not from how great a depth any soil has been brought up, which contained seeds that vegetated.

Perhaps some of our readers may have facts to offer upon the subject which will be interesting. If so, we should be much pleased to receive their communications.—*Maine Farmer.*

Improved Grain Cradle, Wheat Worm, &c.

The Maine Farmer calls the attention of its readers to the following interesting letter from the Rev. Henry Colman to Charles Vaughan, Esq. of Hallowell:

Salem, 25th August, 1837.

DEAR SIR:—I thank you for the snaith and apparatus for reaping, which came duly at hand. My first experiment in a field of barley, somewhat *tangled*, was not successful. My second in a field of wheat was quite satisfactory. The advantages which it has over the cradle in its cheapness, and lightness, and in that any man, who is a good mower, can use it, strongly recommend it; and its introduction will prove, I have no doubt, a general benefit. A cradle here costs three dollars, and as there are few men skilled in the use of the cradle, they command often 2 dollars per day, and then are not readily obtained.

I had an extraordinary man in my employ who has cradled, where the grain was not heavy, six acres of rye in a day. I have known others, who have cradled four; but these I admit are rare cases, and I should agree with you in thinking two acres a fair day's work. I have no doubt that this can be done with this instrument with much more ease than with a cradle; though like every thing else it requires practice to use it skilfully.

Our wheat crops here, which are not extensive, though more wheat was sown this year than for many years before, have suffered a great deal from blight and from the Grain insect. In respect to the application of lime newly slacked, and when the wheat is in flower and wet. I have no theory to establish, but can only say, that a highly respectable gentleman assured me that he had used it three years with entire success, when his neighbors' wheat had been destroyed; that another assured me he had tried it with entire success and had full confidence in it; and that I saw a field of rye then standing, half of which had been limed, the other half not limed. The limed part was apparently untouched—the unlimed severely injured. A remedy or preventive is certainly more important. Judge Buel told me that he had tried lime without any success—but I learnt from him that his lime had been sometime slacked, and had probably become effete. Very late planting, in June, for example, and very early planting have been successful—still the matter is of so great moment that further enquiries and experiments cannot be too strongly encouraged.

We have had introduced here a species of Buckwheat, which they call India Wheat, but which I believe is only the Polygonum Tartericum, which seems to be very prolific. It has yielded from 5 pecks sown 118 bushels—to one bushel sown 100 bushels—and weighs about 50 lbs. Do you know any thing of it? The seed in question came from Vermont.

Yours truly,
HENRY COLMAN.

Herds Grass upon Bogs.

We beg leave to give you one more *tall grass* story with a few practical comments. You will recollect undoubtedly that we made a few remarks a short time since, upon artificial grasses and recommended the cultivation of Herds Grass upon bogs as they are called. We examined while at Mr. Berry's a crop of oats and wheat which he had growing upon a real peat bog upon the margin of a pond. They were sown on the 29th of June last with a mixture of grass seeds. The grass seed was Herd's Grass, red top and fowl meadow. In some places on the side of the piece where the Herd's Grass was sown, it had sprung up to the height of three feet three inches, and was headed out but not blossomed. This was on the last day of August (31st) 73 days from the time of its being sowed.

This bog was dry at the time we were there, but is a genuine peat bog, bearing a natural growth of alders—willows, young ash, &c. &c., as thick as they can stand.

Mr. Berry has cleared away a portion of this growth and is getting it into cultivation; he had a fine patch of potatoes growing there. The water was kept upon it last spring until into June, by a mill dam some distance below. And when he sowed his crop upon it, (20th of June,) it was so miry that cattle could no go upon it at all, he was under the necessity of hoeing the turf up by a *nigger* hoe, and getting the seed in by hand. This delay, occasioned by the water, makes a late crop of it, but it affords a good example to those who have this kind of land. Large quantities of muck can be obtained from it, and Mr. Berry informs us that he has found upon trial, that it forms an admirable dressing for the upland.—*Maine Farmer.*

Morus Multicaulis.

THE subscriber can furnish large and small quantities of the genuine Chinese mulberry, or Morus multicaulis trees of the most thrifty growth and matured wood. The trees are from two to six feet in height, and will be sold at the lowest prices, in proportion to their size. They will be packed so as to insure safe transportation to any part of the United States. Orders for not less than one hundred will be delivered in New York or Philadelphia, or shipped from thence or from Hartford. October and November are the best months for transporting to the South and West.

SILK WORM'S EGGS, of three varieties, White or Two Crop, Sulphur, and Orange colored. Silk Reels, Brook's Silk Spinning Machines, White mulberry seed, &c. &c.

WM. G. COMSTOCK.

Hartford, September, 1837. sep 25—16w

WILLIAM ATKINSON, *LAND AGENT*, 17 Exchange-street, Rochester. ☞ Farms for sale. march 4 6m

Chinese Mulberry Trees. &c.

THE subscribers will supply, at reduced rates, the following trees:

200,000 Chinese Morus Multicaulis, of various sizes, at the lowest prices.

20,000 N. Chinese Morus Expansa, a seedling variety from the Morus Multicaulis, with very large succulent leaves, remarkable for the quantity of nutritious matter. They are engrafted on the White Mulberry, and are hardy enough for the most northern climates, and possess all the advantages of the Morus Multicaulis. These are six feet and upward in height.

3,000 New Hybrid Morus Multicaulis with large leaves and close petals, to 7 feet in height and very hardy.

100,000 Florence Mulberry, with entire leaves, in which point they differ from the common White Mulberry.—These are imported direct from the best silk districts of France, and are 1 1-2 to 2 1-2 feet in height, and will be sold at very low rates.

50,000 Italian White Mulberry, at very low prices.

Also, 100 lbs. White Mulberry seed.

1000 lbs. yellow and white Sugar Beet seed.

Priced catalogues of Fruit and Ornamental Trees, Green House plants, Bulbous Flower Roots, splendid Dahlias and Garden, Agricultural and Flower seeds sent gratis to every applicant.

Orders sent us per mail will receive immediate attention, and forwarded as ordered. Linnæan Garden, Flushing.

WM. PRINCE & SON.

N. B. Companies of individuals desirous to contract for large numbers of Trees, will be dealt with on very liberal terms. sep23

Improved Stock.

THE subscriber has now for sale at his farm, 3½ miles west of the city of Albany, the following choice animals.

Durham Short Horns.

4 Bulls of the Improved Durham Short Horns, from 4 months to 7 years old.
6 Cows and Heifers, from 1 to 11 years old.

Sheep.

8 Pure South Down Tup Lambs.
4 do. Hampshire do. do.
6 Hampshire, crossed with the Bakewell.
1 yearling South Down.
1 do. Hampshire do.
3 do. Bakewell do.
2 Two year old do.
20 Bakewell Ewes.
8 do. do. yearlings.
9 Ewe Lambs, crossed with the Hampshire.
7 Selected Merino Bucks, descended from the stock imported by the late Col. Humphrey of Connecticut.

Applications per mail, [post paid,] will be punctually attended to. CALEB N. BEMENT.

Three Hills Farm, near Albany, Aug. 30, 1837. f6w

Berkshire & Lincolnshire Pigs for sale.

I HAVE a considerable number of late Spring and Summer Berkshire Pigs, crossed with the Lincolnshire, for sale at Whitney's Distillery in the city of Rochester. The character of the Berkshire breed is somewhat known in this country. I believe the Lincolnshire is but very little, if any. I consider the above cross superior to any breed of hogs in America. I have a pig of the above breed that was four months old the 20th of this month. It was put in a pen alone seven weeks ago, it has been well attended to, the result is that the pig gained from 9 to 11 pounds per week.

P S The Lincolnshire breed was imported by Gov. Maitland of Upper Canada. AMOS SAWYER.

Rochester, Aug. 26, 1837. aug 28-17tr3t

Valuable Works on Gardening.

THE YOUNG GARDENER'S ASSISTANT—containing practical directions for the cultivation of Vegetables, Fruits and Flowers. By T. Bridgeman, seedman and florist, New York—seventh edition, improved. Price $1.

THE FLORIST'S GUIDE—containing practical instructions for the cultivation of Flowers. By the same author. Price 37 1-2 cents.

THE KITCHEN GARDENER'S INSTRUCTER—containing ample directions for the cultivation of culinary vegetables, herbs, &c. By the same author. Price 37 1-2 cents.

For sale by REYNOLDS & BATEHAM,
May 20. Rochester Seed Store.

Monroe Horticultural Garden & Nurseries, GREECE, MONROE CO., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.

From the Buckeye Plough Boy.

Early Vegetables.

Every one has observed, that when lettuce seed gets scattered upon the ground in the Fall, and lies in the earth during the winter, it will be up earlier and come to maturity sooner, than where the seed is sown in the spring, be it done as early as it may. The only objection to sowing in the fall, is, the ground becomes so hard, that although the seed comes up quickly, the plant never grows so thriftily, nor becomes so large and grateful to the palate, as when the earth has been mellowed after settling in the spring. The same is the case with Parsnips, Onions, Radishes and many others.

Now to obtain the benefits of fall sowing; and, at the same time, avoid the counteracting circumstance of the ground becoming compact and hard, I would propose that the seed be placed in a small bag, and buried slightly in some safe place till spring, when, soon as the ground is fit to work, prepare a spot for their reception; this being done, dig them up and plant them. The seed by lying in the ground evidently undergoes a preparatory process, essential to a quick and healthy germination, not to be obtained in any other way. What this process is, I am not fully prepared to state; though probably it consists in the absorption of the oil that the seed contains, rendering every part of it susceptible of being acted upon by the moisture of the earth, and thereby fitted to spring quickly into life on feeling the warmth communicated by the April sun.

It is important to have seed of any kind come up quickly after it is sown, that it may get a start in advance of the weeds, which draw away the nutriment essential to a thrifty plant, and by being first up, choke and retard its growth. Take Onions, for example, which are generally three or four weeks coming up: now if they could be made to come up in one, we shall thereby obtain an absolute gain of two weeks of the weeds, which if it should not save once hoeing, it will certainly render the first hoeing less difficult and tedious.

I have witnessed two instances where seeds having lain over winter in the ground, which fully corroborate what I have been stating.

I had occasion to dig a trench eighteen or twenty inches deep, late in the fall, into which I threw a parcel of radish tops filled with seeds, which were afterwards covered up to the full depth of the trench dug. In the spring, I had this same ground spaded up so deep that many of the radish seeds were again brought to the surface. On this I planted beet seed. In two days after the ground was thus prepared, the radish seeds had germinated, and made their appearance, and continued to grow the most luxuriously of any that I ever saw. The other instance strikingly illustrates the benefits of thus disposing of seeds during the winter. It was the following: After having prepared some ground for parsnips, and planted them in the usual manner, I came across a bunch of seed where an ungathered top of a seed parsnip had accidentally got covered up, and lain through the winter. Of this, I gathered up a handful, and threw it broadcast upon the ground I had previously planted. In four or five days this last seed came up, and grew to be several inches high, before the seed first planted was out of the ground, which was as many weeks in coming up, as the other had been days. Here, though accidentally, a fair experiment was made, and positive proof of the advantages to be derived, obtained. There are many other kinds of seeds, which I am fully convinced, may be kept and prepared in the same way for early germination with equally beneficial results. I shall test the experiment more extensively this winter with different kinds, and whether the result prove successful, or a failure, your readers shall be informed in the spring.

WILLIAM WETMORE.

Stow, August 16.

From the London Farmer's Magazine, for June, 1837.

On the Cultivaton of Currants.

BY T. SYMONS.

Currants being a very useful fruit for the table, as well as for tarts, preserving, &c., a hint may not be amiss to such as fail in cultivating them to that perfection which they are capable of being brought to by summer pruning. My method is this:—At the time they are about to set the fruit, I cut back, or pinch off, all such shoots as are not likely to be wanted for the next year's wood, to about two inches from the spurs whereon the bunches of fruit are formed, taking care not to pinch them off too close, in which case the young fruit would wither. By this simple means, the fruit, by receiving more light and air, as well as a greater portion of the assistance from the tree, will swell to the greatest perfection. Should other superfluous branches shoot forth when the fruit is in a more advanced state, they are removed in a similar way, remembering, throughout the season, to keep the bushes as clear as possible of unnecessary wood. The result of this mode of treatment gained me the first prize last year at the Cornhill Horticultural Show at Truro. I should imagine this mode of treatment will answer well for gooseberries; and I should like to know if the Lancashire growers pursue, in any way, a similar method to the above.

The remarks in Vol. X. p. 41., first induced me to try the effect of summer pruning upon the currant; and I shall certainly now generally adopt it. I trust that others will follow the example.

Clowance, April 3, 1837.

The Native American Silk Worm.

In publishing the statement of Mr. Durant in relation to his experiments with a native Silk Worm, the editor of the Virginia *Farmer's Register* remarks:

"We have for three years made attempts to investigate the habits of the insect described above, though with less success than Mr. Durant has met with. From the cocoons, found during winter on many kinds of bushes, it is easy to obtain the living moths, which came out (when kept in a cool house,) early in May, in this region. But, from the small number that we had, and the irregularity of their issuing forth, or some other cause, no impregnated eggs were obtained from the moths so confined. Once only, a female moth was caught that was already impregnated, and had commenced laying while at liberty. Her eggs soon hatched; but though the leaves of sundry trees were tried as food (the mulberry included) the young worms would eat none of them, and all perished. Mr. Durant has gotten over this difficulty, and may be able to rear enough worms to continue the race, and to furnish sufficient samples of their silk. As a mere curiosity it deserves attention; but we are not sanguine as to any profit being obtained from the new fabric—from which much was confidently expected, as a source of national wealth more than a century ago, in Virginia, as appears from the curious old poem inserted in our first volume (page 734) on the "Virginia Silkworm."

The moth, or butterfly, which is the last form of this insect, is the largest winged insect known in this region. One of those in our possession last summer measured six and a half inches across from one extremity to the other of the wings, when laid horizontally. The outer coats of the cocoons are very strong, and so large, that some of ours were made by ingenious ladies into purses, which would hold each as much silver as was convenient to carry in a purse, and more than many of us now own, in this *paper* age.

Since the foregoing remarks were in type, we have seen that the publication of Mr. Durant produced a somewhat angry controversy between him and Mr. Tinelli. The only thing gathered from it, at all material to other persons, is, that Mr. Tinelli; declares the "Native American Silkworm" to be common in Europe, and that its silk is of no value, compared to the silkworms heretofore used.

From the Farmers' Cabinet.

Oat Stubble.

How often do you plough your oat stubble? With some it is the custom to plough once, with some twice, with others three times. The object of this short essay is, to inquire which of the three methods is the most beneficial to the farming interest; and the only true method of arriving at that conclusion, is from the observation of facts. Those persons with whom it is the custom to plough their oat stubble but once, may be set down as an indolent set of men, having little regard for the improvement of either mind, body or estate. The writer of this has observed, in some of the finest land of Pennsylvania, where this method has been pursued, a miserable deterioration of crops: and notwithstanding being sufficiently manured, yet it produced a very inferior crop of wheat; and as for timothy and clover, they scarcely deserved the name of a crop, being entirely superseded by a worthless natural grass and weeds, with which the ground has become entirely overspread. By ploughing oat stubble but once, the soil does not become sufficiently pulverized and intermixed; the roots of natural grass and weeds are suffered to remain too much in an undisturbed condition, and carry on all their process of vegetation, until they entirely occupy the soil, to the exclusion of that which would be more beneficial to the farmer.

Ploughing oat stubble but twice for wheat, (or that which is to be manured,) has its objections also. In the first place, if the manure is hauled and spread before it is ploughed, those deleterious substances, (weeds, grass, briars, &c.) are so long permitted to gain strength, and become so permanently attached to the soil, that the two subsequent ploughings will not be sufficient to eradicate them; and secondly, if the ground is ploughed before the manure is hauled out, the tracks beaten by the team, will plough up in coarse clods in a very unfit state for receiving the seed, and which no after tillage will sufficiently pulverize.

Now the inquiry comes, what will be the best method? Let the stubble be ploughed as soon as possible after the crop is taken off. This will immediately check the growth of grass, weeds, &c. Then let the harrow be passed over to pulverize the surface, after which the manure may be hauled out, spread and ploughed in immediately, to prevent loss by evaporation. Pass the harrow over again. Before seeding, let the ground be ploughed ed again, when it will be found to be completely pulverized and intermixed, and grass and weeds totally destroyed. Where this method has beenadopted, it has been found to be superior to all others.

It must be, and is admitted by all practical agriculturists, that the better the soil is pulverized, the better condit on it is in for producing a plentiful crop. Hence, by this method, there is not only a more certain warrant for a good crop of wheat, but grass has been found invariably to succeed better than in either of the other methods. After the crop of wheat is harvested, the grass affords excellent pasture for cows, being free from weeds, which frequently gives butter an unpleasant flavor.

If those who have never made trial of this system were once induced to adopt it, I am certain they would be convinced of the truth of the positions here asserted, and find themselves not only amply but doubly rewarded for all additional labor. A.

Chester county, Aug. 26, 1837.

BEES.—The Winchester Virginian gives this story of the honey bee: A gentleman took from two hives about twenty-five pounds of honey, which he placed in dishes, in an upper room of his dwelling, with the windows up, in order to let the bees escape which were on it. The next morning the bees were found in numbers removing the honey, and before they could be expelled, which was done *vi et armis*, they had succeeded in carrying off the whole. Thus, in the short space of two hours, they carried away about twenty-five pounds of honey. The gentleman has but six hives on his premises. This affords one of the most singular instances on record of the industry of the honey bee.

Fine Sheep for sale.

25 FULL Blood Saxon.
100 full blood Merino.
50 superior Bucks
100 Lambs, cross bloods.
300 Ewes, do. do.
300 Weathers, in fine condition.

The cross bloods are good Sheep and heavy fleece. The Merino and Saxon are equal to any sheep that can be produced. A credit can be given if required.

LEONARD THOMPSON.

East Bloomfield, Ont. co., Sept. 1837. sep9-3t

Improved Cultivators.

JUST received from Albany, a few of Bement's Expanding Horse Hoes or Cultivator, with extra mouldboards &c. complete. These are the most approved and perfect implements of the kind now in use, and deserve the particular attention of Genesee Agriculturists.

REYNOLDS & BATEHAM.

Rochester Seed Store, June 29, 1337.